

# **Chapter 4**

## **Specification Objections Oct 2007**

### **4.1 Detailed Description points 1 and 2**

#### **1 – 1 Examiner's Objection**

The examiner's points, 1 and 2 are in fact a single objection not multiple ones. The Point 2 simply quotes standard documents. Thus points 1 and 2 are a single objection.

1. The disclosure is objected to under 37 CFR 1.71 as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: Where the disclosure would normally include

a 'detailed description' of the invention after the description of drawings, the specification instead lists several chapters with different headings. It is not immediately clear how these chapters are related to one another in the context of the invention or what is being accomplished.

Applicant is required to submit an amendment, which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e. matter which is not supported by the disclosure as originally filed.)

...

2. The following guidelines illustrate the preferred layout for the specification of a utility patent. These guidelines are suggested for the applicant's use.

...

The examiner quotes part of the following page.

[http://www.uspto.gov/web/offices/pac/mpep/documents/0600\\_608\\_01\\_a.htm](http://www.uspto.gov/web/offices/pac/mpep/documents/0600_608_01_a.htm)

## **1 – 2 Response**

### **1 – 2.1 USPTO Published patent Sep 2005 in its format**

The USPTO published the March 2004 submission in Sep 2005 in its own format. This patent publication by USPTO in the USPTO format can be seen at the following URL.

<http://www.google.com/patents?id=reiWAAAAEBAJ&dq=financial+regime+switching>

The abstract submitted March 2004 appears on front page of the USPTO publication.

The background of the invention appears on pages 1 to 5 as numbered by USPTO although these are actually 13 to 18 of the pdf document.

Chapter 2 brief description of the drawings is on page 5 to 6.

The detailed description starts on page 6 as numbered by USPTO in its publication. That runs to page 24 as numbered by USPTO.

The claims begin on page 24 and are numbered 1 to 16 of the USPTO publication.

The Brief Summary of the Invention was not included in the March 2004 original submission. So in April 2008 it was requested to use the Abstract of the Disclosure with the added paragraph as the Summary of the Invention. That request is repeated here.

In summary. The patent office scanned in the submission from March 2004 and arranged it in its own standard format. The abstract of the disclosure is on the first page. Background of the invention appears in the patent office publication in its proper place. Next is description of the drawings in its proper place. Then comes the detailed description of the invention. Claims are numbered 1 to 16 in the patent office publication of 2005 at the end. Thus the USPTO scanned in and formatted the March 2004 submission according to its format. The Summary of the Invention was not included in

the submission or publication. By its publication of the patent submission from March 2004 in the USPTO format the USPTO is bound by its own publication. USPTO has received the March 2004 and formatted in its own format recognizing the parts as of Sep 2005.

#### 1 – 2.2 Further clarification on detailed description

Chapters 3 to 10 of the original document are the "detailed description of the invention." The original left out the summary of the invention. This was added and in the new version of the specification, chapters 4 to 11 are the detailed description.

Pages were added to the specification to clarify the start and stop of the detailed description.

There was an abstract of the disclosure in the original single spaced version prepared in the draft stage work prior to submission. The double spaced version submitted to USPTO had that as shown by that abstract being published by USPTO in Sep 2005. The original abstract is now included as the abstract with an additional paragraph added. This abstract with the addi-

tional paragraph was also included as the summary of the invention in the new specification submitted in April 2008. That is now chapter 2 in that specification.

#### **1 – 2.3 Patent Office publication 2005 request to acknowledge**

Request for acknowledgement. Applicant requests USPTO to acknowledge that USPTO published applicants March 2004 in September 2005 and that the USPTO publication in Sep 2005 is in proper order. If USPTO declines to acknowledge that, can USPTO kindly refer to and explain which parts of USPTO publication in Sep 2005 are not in USPTO format.

### **4.2 Abstract of Disclosure**

#### **2 – 1 Examiner Objection**

Applicant is reminded of the proper content of an abstract of the disclosure.

(quotation from standard materials also in the USPTO Oct 2007 response, but not retyped here.)

**2 – 2 Response**

It appears the examiner did not notice the abstract of the disclosure in the original submission. The original document submitted March 22, 2004 contained an abstract of the disclosure. However it did not have a chapter heading. It was on a separate page at the end with the heading ABSTRACT OF THE DISCLOSURE.

Despite the absence of a chapter heading, the USPTO in its publication of the March 22, 2004 submission, correctly identified the abstract of the disclosure and placed it in the correct place in its publication of the original submission.

A paragraph was added in the April 2008 submission.

The abstract of the disclosure was copied to be the summary of the invention with the added paragraph in the April 2008 substitute specification.



# **Chapter 5**

## **Claims Objections Oct 2007**

### **5.1 1. Numbering of Claims**

#### **1 – 1 Examiner’s Objection**

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claims 11.1-11.16 have been renumbered 1-16.

**1 – 2 Response**

Everything up to the last sentence of the examiners objection is standard reference material and does not apply to the 2007 Objection, because there had never been any change by applicant from the submission March 22, 2004 to the office action of October 2007.

Agree with examiner's "renumbering". This is the same renumbering as exists in the September 2005 publication by USPTO of the patent. USPTO publication in Sep 2005 of the March 2004 application is at following URL.

<http://www.google.com/patents?id=reiWAAAEBAJ&dq=financial+regime+switching>

**5.2 2. Dependent Claim form****2 – 1 Examiner's Objection**

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim that depends from a dependent claim should not

be separated by any claim that does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP Section 608.01(n).

## 2 – 2 Response

This is a statement of standard practice not directed to the submission with any specificity. It is meant, presumably, as reference for examiner's further objections.

Applicant does not disagree with examiner's quotation of USPTO material. Applicant has applied this information from examiner in applicant's April 2008 Amendment and subsequently. Applicant appreciates examiner pointing out these aspects of dependent claims.

**5.3 3. Claims 3,9,11, 13 and 14 Informalities****3 – 1 Examiner’s Objection**

Claims 3,9, 11, 13, 14, and 16 are objected to because of the following informalities: dependent claims should reference, by number, the claim from which it depends. The term 'foregoing claim' or 'preceding claim' is improper. Appropriate correction is required.

**3 – 2 Response**

These were corrected in the April 2008 amendment which the examiner did not object to in the June 2008 or October 2008 examiner’s reply.

**5.4 4. Claims 4,5, 10 improper dep form****4 – 1 Examiner’s Objection**

Claim 4,5, and 10 are objected to under 37 CFR 1.75 (c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

dependent form, or rewrite the claim(s) in independent form. A proper dependent claim should apply a transition phrase after the preamble which indicates that the limitation of the dependent claim is part of the independent claim. See MPEP 2111.03 and 2111.04.

#### **4 – 2 Response**

These were corrected in the April 2008 amendment which the examiner did not object to in the June 2008 or October 2008 examiner's reply.

#### **5.5 5. Claims 10, 11 improper dep form**

##### **5 – 1 Examiner's Objection**

Claims 10 and 11 are objected to under 37 CFR 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s), to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 10 and 11 are directed toward a different class of

invention from claim 1 and thus should not be dependent upon  
claim 1.

## **5 – 2 Response**

These were corrected in the April 2008 amendment which the examiner did not object to in the July 2008 or October 2008 examiner's reply.

### **5 – 2.1 Dependent claims across statutory classes**

I may not have understood the objection on a dependent claim from another class of statutory matter. I include the following as part of the dialogue.

[http://www.uspto.gov/web/offices/pac/mpep/old/E7R1\\_600.pdf](http://www.uspto.gov/web/offices/pac/mpep/old/E7R1_600.pdf)

Page 600-68

The fact that the independent and dependent claims are in different statutory classes does not, in itself, render the latter improper. Thus, if claim 1 recites a specific product, a claim for the method of making the product of claim 1 in a particular manner would be a proper dependent claim since it could not be infringed without infringing claim 1. Similarly, if claim 1 recites a method

of making a product, a claim for a product made by the method of claim 1 could be a proper dependent claim.

## 5.6 6. Claim 12 improper dep form

### 6 – 1 Examiner’s Objection

Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 12 is structured so that it is limited by claim 1 or 8 or 10. A proper dependent claim limits the claim from which it depends.

### 6 – 2 Response

These were corrected in the April 2008 amendment which the examiner did not object to in the June 2008 or October 2008 examiner’s reply.

## **5.7 Additional Description**

### **7 – 1 Examiner’s objection**

Claims 1-16 are objected to because of the following informalities: Claims should not be listed by number only. Additional description of statutory class of invention is not required. Appropriate correction is required.

### **7 – 2 Response**

These were corrected in the April 2008 amendment which the examiner did not object to in the June 2008 or October 2008 examiner’s reply.

# **Chapter 6**

## **Claim Rejections Oct 2007**

### **6.1 Claim 10-16 Non Stat Subj Matter.**

#### **1 – 1 Examiner’s Rejection**

Claims 10-16 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

A physical object, EUE, portfolio or lines of business are not statutory classes of invention.

#### **1 – 2 Response**

Claims 10 to 16 were canceled. However, for new claims 18 to 21, the following response is provided.

**1 – 2.1 Claim to a portfolio or financial product, 18-21**

A portfolio is claimed as a manufacture. Portfolios are recognized in the law.

Portfolios are recognized in securities law, contract law, estate law, etc. A portfolio does not occur in nature but is made by man. Thus a portfolio is statutory subject matter.

A financial product is claimed as a manufacture. The financial services industry has chosen this term precisely to reflects its view that it manufactures them.

**1 – 2.2 Diamond v. Chakrabarty**

The Committee Reports accompanying the 1952 Act inform us that Congress intended statutory subject matter to "include anything under the sun that is made by man." S. Rep. No. 1979, 82d Cong., 2d Sess., 5 (1952); H. R. Rep. No. 1923, 82d Cong., 2d Sess., 6 (1952). 6

This is not to suggest that 101 has no limits or that it embraces every discovery. The laws of nature, physical phenomena, and

abstract ideas have been held not patentable.

A portfolio is not any of the excluded categories: "The laws of nature, physical phenomena, and abstract ideas."

A portfolio is made by man. So is a financial product.

**1 – 2.3 In re Petrus Nuijten (CAFC 2006-1371)**

CAFC decision.

<http://www.cafc.uscourts.gov/opinions/06-1371.pdf>

The conclusion of the majority on page 19 of the pdf, numbered page 18 of the opinion indicates that the conclusion is limited only to a transitory signal.

III. Conclusion

"A transitory, propagating signal like Nuijten's is not a "process, machine, manufacture, or composition of matter." Those four categories define the explicit scope and breadth of subject matter patentable under 35 U.S.C. Section 101; thus, such a signal cannot be patentable subject matter.

A portfolio is not transitory. Nor is a financial product. Thus the basis of denying the manufacture claim in Nuijten does not apply to a portfolio or financial product. The rest of the opinion including the dissent of Linn shows that a portfolio is a manufacture. So is a financial product. The very words financial product show the industry claims them as a manufacture.

## **6.2 Rejection Original Claims 1-16**

### **2 – 1 Examiner’s Objection no useful result**

Claims 1 to 16 are rejected under 35 USC 101 because the claimed invention lacks patentable utility. Claims 1-16 are not directed toward any useful, concrete, or tangible result. The claimed invention as a whole must accomplish a practical application or real world value. See MPEP 2106 [R-5]

### **2 – 2 Response**

See also response to the rejection of claims 10-16 of the original 2004 submission by examiner in October 2007 just previous to this.

**2 – 2.1 Claims 1 to 9, 17-18, and 22-24**

After cancelling and new claims, the objections may more nearly related to  
Claims 1 to 9, 17-18, and 22-24.

**2 – 3 in parte Bilski**

The USPTO has posted the following 2006 decision (later appealed to CAFC)

<http://www.uspto.gov/web/offices/dcom/bpai/its/fd022257.pdf>

Claims 1 to 9, 17, 22 and 24 in the Amendment are claims that contain  
technical implementations using technical means of the type the USPTO has  
accepted. In the Bilski case, the USPTO objected to the absence of technical  
means.

### **6.3 Conclusion**

The conclusion of the examiner's action in October 2007 does not state any  
objections or rejections therefore no response is made to it.



# **Chapter 7**

## **Objections-Rejections June 2008**

June 2008 contained a single objection, 4c.

### **7.1 4c Proper Status Identifier**

#### **1 – 1 Examiner’s Objection**

Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim can not be evaluated. Note the status of each claim must be indicated after its claim numbers by using one of the following status identifiers: (Original), (Currently Amended), (Canceled), (Previously Presented), (New), (Not Entered), (Withdrawn) and (Withdrawn-

currently amended).

## **1 – 2 Response**

The July 2008 contained status identifiers for the claims. Except for 2 of those in the amendment of July 2008, all were accepted by the examiner in October 2008. The 2 others have been changed to new as requested by the examiner in October 2008.

# **Chapter 8**

## **Objections-Rejections Oct 2008**

### **8.1 1a Markings**

#### **1 – 1 Examiner’s Objection**

Amended paragraph(s) do not include markings.

#### **1 – 2 Response**

The examiner’s reply in June 2008 was an objection/rejection only to the claims, and at that time he accepted the rest of the specification amendment.

Nonetheless, we respond to these issues now raised by the examiner.

Note that 1 B which is not checked says itself ”New paragraph(s) should not be underlined.”

There are no paragraphs in the specification or its amendment that con-

tain changes where one would underline a few words here and or strike out a few others there.

The March 22, 2004 original submission contained an abstract of the disclosure that was published by USPTO in the Sep 2005 publication of the patent.

The April 2008 amendment adds a new paragraph to that abstract of the disclosure. As the presence of 1B on the form shows, that new paragraph should not be underlined, at least if its submitted in an amendment and not as part of an entire replacement specification.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/moreinfoamdtprac.htm>

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/officeflyer.pdf>

"B) Amendments to the specification:"

"Newly added paragraphs or sections, including a new abstract (instead of a replacement abstract), must not be underlined."

Although in full, it says

" B) Amendments to the specification:

Amendments to the specification, including the abstract, must be made by presenting a replacement paragraph or section or abstract marked up to show changes made relative to the immediate prior version. An accompanying clean version is not required and should not be presented. Newly added paragraphs or sections, including a new abstract (instead of a replacement abstract), must not be underlined. A replacement or new abstract must be submitted on a separate sheet, 37 CFR 1.72. If a substitute specification is being submitted to incorporate extensive amendments, both a clean version (which will be entered) and a marked up version must be submitted as per 37 CFR 1.125.

The changes in any replacement paragraph or section, or substitute specification must be shown by underlining (for added matter) or strikethrough (for deleted matter) with 2 exceptions: "

My reading of this is that it is contradictory. New paragraphs in a re-

placement section should not be underlined and should be underlined is what it says.

"Newly added paragraphs or sections, including a new abstract (instead of a replacement abstract), must not be underlined."

"The changes in any replacement paragraph or section, or substitute specification must be shown by underlining"

[http://www.uspto.gov/web/offices/pac/mpep/documents/0700\\_714.htm](http://www.uspto.gov/web/offices/pac/mpep/documents/0700_714.htm)

htm

"714 (b) (1) (iii) The full text of any added paragraphs without any underlining;"

Note that the examiner requested an Abstract of the Disclosure in Oct 2007, even though one was submitted in March 22, 2004 and was published by the USPTO in Sep 2005. The examiner also requested markings in the Oct 2008. Given these two requests by examiner, the only way to comply is to provide the full abstract of the disclosure with the new paragraph underlined.

This is done in this amendment.

The substitute specification submitted April 2008 did not have underlining of the added paragraph of the Abstract of the Disclosure.

The Summary of the Invention was a copy of the Abstract of the Disclosure with the added paragraph. That was also not underlined in that complete specification.

However, the Abstract of the Disclosure was included in the Amendment on a separate page in the April 2008 Amendment and the July 2008 Amendment and did not include underlining. That conforms to the requirements at the USPTO link above. The new paragraph in the Amendment has no underlining. Thus the markings in the April 2008 and July 2008 Amendment are correct, none.

The complete specification was in response to the examiner's request for clarification of which parts are which. Thus it was provided to benefit the examiner.

It also turns out that the USPTO had published the March 2004 application in its format. Thus the clarification contained in the April 2008 complete

specification to clarify the confusion the examiner expressed is redundant to the USPTO's own publication in Sep 2005 of the original application.

This clarification specification was directed towards explaining where the detailed description began and ended in response to the examiner's request. It therefore should not negate the conforming amendment for the Abstract of the Disclosure. It is in fact a valid clean specification and it does go to answering the request of the examiner to explain which part of the application corresponds to the different parts as labeled by the USPTO.

The USPTO has, in any case, published in Sep 2005 the original application in its format. The amendment of the abstract of the disclosure has no underlining. Thus the clean copy submitted in April 2008 of the complete specification to aid the examiner as to where sections start or end should not negate the compliance of the amendment or the USPTO's own publication in Sep 2005 in its own format of the original application submitted in March 2004.

### 1 – 3 Request for USPTO to choose

Please choose the version of the Abstract of the Disclosure and the Summary of the Invention that the USPTO prefers. Both are provided, one with underlining of the new paragraph and one without.

To repeat the USPTO has contradictory statements:

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognote/officeflyer.pdf>

” Amendments to the specification, including the abstract, must be made by presenting a replacement paragraph or section or abstract marked up to show changes made relative to the immediate prior version. An accompanying clean version is not required and should not be presented. Newly added paragraphs or sections, including a new abstract (instead of a replacement abstract), must not be underlined.”

” The changes in any replacement paragraph or section, or substitute specification must be shown by underlining ”

Note that the paragraph above includes replacement paragraphs, sections

and abstracts when it says newly added paragraphs or sections including a new abstract must not be underlined.

Note that the Form has 1 B which is not checked says itself "New paragraph(s) should not be underlined."

So which is it? Note that 1B does not say "New paragraph(s) should not be underlined if submitted by themselves but should be underlined if submitted in a replacement section or specification."

1B says

"New paragraph(s) should not be underlined."

As if that applies to an added paragraph by itself, an added paragraph in a replacement section or an added paragraph in a repacement specification.

Reading through MPEP 714, CFR 1.125, the flyer linked above, and the USPTO's rejection/objection form, the message is not sufficiently clear as to when new paragraphs should be underlined or not. The flyer is explicitly self contradictory. But it is on the webpage of links provided by examiner for applicant to consult. I suggest this be explicitly changed in each place

to be definite. So if new paragraphs are underlined in replacement sections, that should be stated in MPEP. Same if new paragraphs are underlined in a replacement specification. Moreover, the form itself should reflect that.

#### **1 – 4 USPTO sample has new paragraph not underlined**

The USPTO has one and only one example of a new paragraph in its sample amendment. That new paragraph is not underlined in the USPTO example.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/formatrevamdtprac.pdf>

” Please add the following new paragraph after paragraph [0075]: [0075.1]

An optional feature of the articles of the invention is the addition of a tetrafluoroethylene coating to the bucket to provide protection from any contents which might be caustic. The coating can be provided to the surface during the manufacturing process or can be added in a later step. ”

Note that in October 2008 the examiner pointed out this document as the one for applicant to use. The example pointed to by examiner is where

the new paragraph has no underlining. Yet examiner rejected applicant's specification amendment for not having markings. But there was nothing taken from the specification, only this paragraph added. So if applicant follows the one example USPTO provides of a new paragraph, and which was pointed to by examiner in the same office action objecting to the specification amendment, it contains a new paragraph without underlining. Which is exactly what was already in applicant's specification amendment.

If the examiner wants the added paragraph underlined, why does he point out the USPTO example where the added paragraph is not underlined?

### **1 – 5 Request to post example for each case**

The USPTO should post its preference in each case in its sample amendments webpage area. It should have an example with a replacement section where a new paragraph is added and show it underlined or not. The same should apply to a new abstract as opposed to a replacement. The same should apply to the case the entire specification is replaced.

I offer to work with USPTO to word process each case, for them to review

it, and then for the USPTO to post the set of cases on their webpage. Given the large number of patent submissions made, this should be of substantial public benefit. Alternatively, if they could post some examples of actual cases of correspondence on this on their webpage in the same area as their example is now, that would be of benefit. I volunteer all my correspondence on this case to be posted as one of the examples.

## **1 – 6 USPTO inconsistency on Abstract of Disclosure**

In any case, after the USPTO asks for markings, and it gets markings, it should not then send a rejection back for having underlined new paragraphs. There was nothing else to mark but the new paragraphs. Nothing else was changed in the specification. So underlining is the only markings that can be added. So if the next action is to reject for underlining it shows inconsistent directions from USPTO. Moreover, at this stage, there can be no genuine reason for USPTO to continue on this course over this added paragraph.

Moreover, the objection of markings should have been made in the June 2008 office action not in the October 2008 one. The USPTO is supposed

to make all its objections/rejections each time, not string them out is my understanding. This is particularly the case, where there is so little at issue. One new paragraph. Moreover, this is a case that reflects USPTO confusion between the office action of Oct 2007 which said there was no abstract of the disclosure, and the USPTO publication in Sep 2005 which published the abstract of the disclosure.

There is no consistency among the USPTO actions from Sep 2005 to present on the Abstract of the Disclosure. First they publish the Abstract in Sep 2005. Then they say its not there in Oct 2007. Then they accept it in June 2008 with the added paragraph. Then they reject it in Oct 2008 for not having markings. If the next action is to reject it for underlining what is to be said of this line of conduct?

I believe that the two sides should come to agreement on the added paragraph. It should not go on for years as to whether the added paragraph should be underlined or not. The paragraph was added in April 2008. Its now the end of March 2009. Applicant has submitted three including this

one amendments. The USPTO has responded with two office actions so far, 3 if we include October 2007 when it asked for the abstract of the disclosure even after it published it in Sep 2005. So by that count we are already over 1 year on this topic with 3 actions on each side.

Moreover, the added paragraph being underlined or not can not be the basis of not doing the search of the prior art and responding on the claims. The Oct 2007 office action said that this was precluded by the application not being comprehensible, even though it was already published by USPTO in Sep 2005 in USPTO's format with the parts in the right places and on the Internet already in that published form. The version published by USPTO in Sep 2005 could have been used by USPTO to do the prior art search.

"The disclosure is objected to under 37 CFR 1.71 as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner."

That was written in Oct 2007 by USPTO. But at that date, the USPTO had published over 2 years earlier the application in its format and it was on the Internet. Here is the link again:

<http://www.google.com/patents?id=reiWAAAAEBAJ&dq=financial+regime+switching>

The USPTO can do the prior art search and respond to its own publication in its own format.

I respectfully request the USPTO to explain why its own publication in September 2005 in its own format was deficient.

### **1 – 7 Request accept compliant already on specification**

The USPTO has rejected the specification as not compliant over the abstract of the disclosure as missing in Oct 2007 when it published the abstract in Sep 2005.

USPTO accepted the amendment of the specification in June 2008 with the Abstract of the Disclosure in the amendment with the added paragraphs when it only objected to the claims.

Applicant requests USPTO to accept the Abstract of the Disclosure of the specification as compliant as of March 2004. If not as of March 2004 then

as of Sep 2005 when published by USPTO in USPTO's format. If not as of Sep 2005 then as of Oct 2007 when USPTO incorrectly said it was missing despite having published it. If not as of Oct 2007 then accept the amendment as compliant as of April 2008 and if not April 2008 as of June 2008 when accepted by the USPTO in its own office action and if not as of June 2008 as of July 2008 in applicant's new amendment and if not as of July 2008 as of October 2008 and if not as of October 2008 as of March 2009.

What issue could possibly still be confusing to the USPTO on the Abstract of the Disclosure as of this date? Please state it in writing? What form do they want it? Underlined or not? Other markings? Where on what?

## 1 – 8 Further remarks

The revised specification submitted April 2008 contained inserted pages to point out where various sections began and end. These pages did not have underlining. However, since it was a complete specification, no underlining was required under those words nor in the added paragraph of the abstract of the disclosure, which was also added to the identical summary of the

invention.

The original March 2004 did not have a summary of the invention but did have the abstract of the disclosure at the end, page 173. So in the April 22, 2004, the abstract of the disclosure was copied to be the summary of the invention. Both the abstract of the disclosure and the summary of the invention were given section titles.

That the USPTO itself published the original March 2004 specification in its format should also resolve any confusion remaining.

## **8.2 1c Unclear see MPEP 714**

### **2 – 1 Examiner’s Objection**

”Continuation of 1(c) Other. The amendments to the specification described are unclear. Applicant is directed to MPEP 714 for making proper amendments to the specification.”

### **2 – 2 Response**

The amendments to the specification have been revised in this amendment.

Please see the new amendment specification.

Please see the prior remarks in response to the Oct 2007 objections/rejections of the specification as unclear. Those remarks go into great detail and there is no point copying them here and expanding the bulk of this amendment even more.

### 8.3 4c Status identifier

#### 3 – 1 Examiner’s Objection

Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim can not be evaluated. Note the status of each claim must be indicated after its claim numbers by using one of the following status identifiers: (Original), (Currently Amended), (Canceled), (Previously Presented), (New), (Not Entered), (Withdrawn) and (Withdrawn-currently amended).

#### 3 – 2 Response

It was not stated which claims this referred to. Presumably it is claims 18 and 19 since 4e refers to those.

Claims 18 and 19 were given the (New) status identifier in this current Amendment as the examiner requested in the Oct 2008 office action.

Note that "presently amended" (page 13 of July 9 2008 amendment) changed to "presently amended" in text before Claim 17.

#### **8.4 4e Claims 18 and 19 mark as new**

##### **4 – 1 Examiner's objection**

Claims 18 and 19 should be marked as new even if they are intended to amend a previous claim. Applicant's explanation for not using proper procedure (strikeout was too extensive) is not acceptable. Applicant is reminded to review MPEP 714.

##### **4 – 2 Response**

They are marked as new in this amendment.

#### **8.5 5 other**

This is broken into parts. Note the examiner does not say that the July 2009 amendment is not signed.

## 8.6 Reply to each objection/rejection

### 6 – 1 Examiner’s objection

The amendment can be considered non-responsive according to 37 CFR 1.111. In particular, the applicant must reply to each objection/rejection made specifically and distinctly. The remarks do not state the objection or rejection (101/112) made and the claims to which they are directed.

### 6 – 2 Response

This is not done in the sample amendment on USPTO web page pointed out by examiner. Applicant had in fact used that as a template which is why applicant did not quote the objection/rejection of examiner.

Despite this, and unlike the template on USPTO webpage pointed out by examiner, but as examiner has requested, every objection and rejection in any response by examiner is distinctly quoted or indicated in this amendment and the response indicated in this amendment.

Objections made in Oct 2008 to the specification could have been made

in June 2008 office response but were not.

The sample amendment of USPTO does not state examiner's objections and rejections as examiner requested in the Oct 2008 examiner response. Applicant had already consulted this sample amendment and that is why objections rejections were not stated by applicant.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/formatrevamdtpra.pdf>

REMARKS/ARGUMENTS In the specification, the paragraphs [0021] and [0045] have been amended to correct minor editorial problems. The new paragraph [0075.1] added after paragraph [0075] discusses in general terms the features taken from Example 4. In amended Figure 2, the previously omitted element numeral 13 has been added. Claims 6-10 and 12-13 remain in this application. Claims 1-5 and 11 have been canceled. Claims 7 and 8 have been withdrawn. The examiner has acknowledged that claims 6 and 9-10 are directed to allowable subject matter. Claim 7-8

have been withdrawn as the result of an earlier restriction requirement. Claim 13 adds an additional feature from Example 2 in the specification. In view of the examiners earlier restriction requirement, applicant retains the right to present claims 7-8 in a divisional application . . . Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Attachments  
Respectfully submitted,

There is no restatement of examiner's objections or rejections in the USPTO sample amendment on USPTO's webpage that was pointed out by examiner and which applicant had previously relied on.

## 8.7 Contact examiner for guidance

### 7 – 1 Examiner's comment

The applicant is also encouraged to seek the assistance of a qualified patent attorney and/or contact the examiner for guidance. The applicant is also encouraged to review the USPTO website at [www.uspto.gov](http://www.uspto.gov). Particular help can be found at:

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/moreinfoamdtprachtm>

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/formatrevamdtprapdf>

## 7 – 2 Response

Interview scheduled for 2 PM Tuesday April 1, 2009. Applicant thanks examiner for agreeing to let applicant submit amendment March 31, 2009 and meet with examiner April 1, 2009 for further guidance and then to submit an additional amendment.

I have referenced these URL's in this document. Also the sample response at above URL does not restate examiners rejections or objections.

## 8.8 Portfolio and financial product

### 8 – 1 Examiner's Comment

Lastly, applicant is invited to review MPEP.210 for patent eligible subject matter. Despite applicants assertions that a portfolio and a financial product are patent eligible, the examiner

asserts they are abstract ideas and as such may be patent eligible if there is a practical application. A practical application being the transformation of an object or article to a different state or if a useful, concrete AND tangible result is produced.

## 8 – 2 Response

Abstract ideas may be defined as (1) Platonic, a perfect form for each instance, (2) Set, the set of all instances, (3) Russell's, a series of attributes to test for the presence of each (4) Logcial Positivism, the testable implications of the idea, (5) materialistic, where the testable implications are the implications for material objects or energy, and so far. In all these definitions, any currently allowed patentable claim is an abstract idea. There is no definition of abstract idea in logic or philosophy in which a patent claim is not an abstract idea. Nor does an attempt to reduce a claim to its material implications alter this. All abstract ideas can be defined as having as there meaning their implications for energy, momentum, position, or other experiments.

A portfolio or financial product is testable in the physical world. We can test if a person owns a specific portfolio or a specific financial product. Thus a different portfolio or financial product has different implications for physical reality that are tested. It can be ascertained using physical means which portfolio a person owns, or whether they own a financial product. Thus portfolio and financial product are testable by physical means. Portfolios and financial products that are different, can be ascertained and distinguished using physical means. This means they have physical implications that can be reduced to tests of energy, moment, position and the like.

Russell pointed out that if naive materialism is true or classical physics is true, then it implies quantum mechanics, which implies naive materialism or classical physics are not true.

The attempt to say abstract ideas do not have implications for energy or the position of matter is not supported by the definitions of abstract idea in logic, philosophy, or by quantum mechanics or even relativity.

Relativity and quantum mechanics both imply that energy and position

are both informational in nature. Relativity has them dependent on the observer. Quantum mechanics makes them into operators or into aspects of the state vector or state function, which is a purely informational object.

A financial product or portfolio alters the quantum mechanical state vector, i.e. information state of the universe, and thus is physical. This means it alters information on energy, momentum, position or the like.

Relativity states position, time, energy and momentum are relative to an observer, and thus are all informational. Quantum mechanics takes this even further and makes them attributes of a pure mathematical information function that contains all information.

Physical reality is defined solely by the information function in quantum mechanics, the state vector in a Hilbert Space. Thus physical systems are state vectors in Hilbert Space. One abstract idea is distinguished from another, or one portfolio a person owns from another based on the different state vectors in Hilbert space corresponding to the different cases. Moreover, this is true of every patent claim.

Every patent claim distinguishes one set of state vectors in Hilbert Space from another. They do no more and no less. That is true of all abstract ideas or ideas. Meaning is reduced to distinguishing sets of state vectors in Hilbert Space.

Every test is such a distinction. All experiments are. All practical uses or applications of anything, patent or not, are to identify different states in Hilbert space or to change their quantum mechanical amplitude. Physics has evolved to a theory of pure meaning and pure mathematics. All practical applications are purely mathematical, because all of physical reality is restricted to distinguishing vectors in Hilbert Space.

To paraphrase the poet, state vectors in Hilbert Space are all ye know on earth, and all ye need to know. They are all you can know. They are informationally complete. That is the meaning of uncertainty relations and the like. Any practical application is about distinguishing them or changing the coefficient of them in a linear combination of the state vector in terms of some set of basis state vectors.

Claims to financial products and portfolios do distinguish states in Hiblert Space. Thus they are physical. They do have tangible implications. Tangible means a method to distinguish state vectors in Hilbert space or sets of them. Thus financial product and portfolio are tangible. Tangible means you can distinguish bits of information corresponding to different states in Hilbert Space. Tangible is a test that can do that. That's what it means. The same with practical implication and the like.

The stability of matter does not occur in classical mechanics, but only in quantum mechanics. There is no stability of matter in classical physics. It was show that classical mechanics and classical electromagnetism imply that an electron in orbit of a proton will radiate energy until it collapses into the proton. This happens rapidly.

[http://books.google.com/books?id=u-\\_di7g1v9YC&pg=PA639&lpg=PA639&dq=atoms+radiative+collapse&source=bl&ots=p0gRmQmYdt&sig=Vh-kZkYYEZgZJD11E3qAp8JG2h4&hl=en&ei=juzPSc25JZrulQeX2JXWCQ&sa=X&oi=book\\_result&resnum=22&ct=result](http://books.google.com/books?id=u-_di7g1v9YC&pg=PA639&lpg=PA639&dq=atoms+radiative+collapse&source=bl&ots=p0gRmQmYdt&sig=Vh-kZkYYEZgZJD11E3qAp8JG2h4&hl=en&ei=juzPSc25JZrulQeX2JXWCQ&sa=X&oi=book_result&resnum=22&ct=result)

"An Introduction to Quantum Physics" by Anthony Philip page 639.

Tangible is not meaningful without the stability of matter. If your hand disintegrates in under a microsecond, or even 1 second, then you can't test tangibility. You can't touch it if you and it disintegrate in a fraction of a second. You can't touch it without using electromagenetic fields. But classical physics of electromagnetic fields leads to atomic collapse at fast time scales.

Stability of matter is a purely quantum mechanical effect. It depends on the fermionic nature of the state function with multiple particles, i.e. input variables, of fermionic type, as well as the overall informational and purely mathematical nature of quantum mechanics. In particular, if  $f$  is the information function then  $f$  has the property that

$$f(\dots r_1, s_1, \dots, r_2, s_2, \dots) = -f(\dots r_2, s_2, \dots, r_1, s_1, \dots)$$

Here 1 and 2 are two identical fermions, e.g. electrons. The  $r_1$  and  $r_2$  are 3 vectors of position in space and  $s_1$  and  $s_2$  are spin variables. Its this switching property of this mathematical function that causes the stability of matter. That in turn is the basis of tangibility. The above equation could be

termed part of the meaning of stability and tangibility. Stability and thus tangibility is one aspect of the mathematical property in the above equation, together with a few other mathematical properties as well.

An introduction to this topic is the short discussion with references by Wolfgang Spitzer following.

[http://leibniz.iimas.unam.mx/~sscqm/files/course\\_spitzer.pdf](http://leibniz.iimas.unam.mx/~sscqm/files/course_spitzer.pdf)

See also here

[http://en.wikipedia.org/wiki/Pauli\\_exclusion\\_principle#Stability\\_of\\_matter](http://en.wikipedia.org/wiki/Pauli_exclusion_principle#Stability_of_matter)

Stability of matter is a complex mathematical physics topic relating to the state vector in quantum mechanics and its mathematical properties including anti-symmetry on switching the input variables from two identical fermion particles. Tangibility is a related topic to stability of matter and is subject to the same mathematical physics type analysis as that cited. Its all informational and its all pure math.

Tangibility is a property of mathematical structures. That's its entire

meaning. Tangibility is a mathematical property of vectors in Hilbert Space.

The same applies to stability of matter. The same applies to anything else physical. The same applies to anything humans can test or determine including ownership of a portfolio or financial product or distinguishing one from another.

The recent financial crisis shows how practical a safe portfolio or financial product is compared to one that leads to financial crisis. Credit default swaps can cause huge implications when not structured or risk managed properly. Financial institutions are subject to the same analysis, as are bailouts, guarantees, and the like. All practical, all informational, all mathematical, and all physical.

If one believes in a balancing test where math algorithms or ideas that are too valuable are not allowed because they pre-empt uses of the same idea or algorithm by others then a financial product or portfolio is an answer to meeting that balancing test. It doesn't pre-empt other uses. A financial product or portfolio rewards the invention of a math algorithm but doesn't

pre-empt other uses of it by others.

Recent arguments or opinions in the direction of a balancing test for mathematical algorithms are thus consistent with financial product and portfolio as statutory claims. They reward the inventor of a new mathematical algorithm but don't preempt its use by others.

The two Supreme Court pencil cases of 1874, Rubber Tip, and 1875 Reckendorfer v Faber should be taken together in evaluating the meaning of the 1874 Rubber Tip Pencil case. The Rickendorfer v Faber pencil case of 1875 after Rubber Tip case of 1874 shows that the Rubber Tip decision was not that an abstract idea can't be patented, but that in the 1874 case of Rubber Tip, the invention was one of ordinary skill. The 1875 decision goes into this in great detail explaining that was the meaning of the 1874 Rubber Tip decision. The 1875 case then decides its case based on the question of whether the pencil at end is an invention of ordinary skill or not. Thus these two decisions taken together stand for the principle that inventions of ordinary skill are not patentable and not that an idea is itself not patentable.

Refernces in full to these two cases are as follows.

RUBBER-TIP PENCIL COMPANY V. HOWARD, 87 U. S. 498 (1874)

<http://supreme.justia.com/us/87/498/case.html>

RECKENDORFER V. FABER, 92 U. S. 347 (1875)

<http://supreme.justia.com/us/92/347/case.html>

# **Chapter 9**

## **Closing**

Respectfully submitted,

Mark S. Tenney



A handwritten signature in black ink, appearing to read "Mark S. Tenney". The signature is written in a cursive style with a horizontal dashed line underneath it.

703-799-0518